

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. (currently amended): A service management apparatus for use in a network system capable of providing various services dispersed in ~~plural~~ a plurality of apparatuses, managing service information of the various services present on the network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, ~~the~~ said service management apparatus comprising:

test means for executing a process of a trial use of one of the various services provided by ~~said apparatus~~ one of the plurality of apparatuses, wherein, in said trial use, said test means sends data to the service;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

renewal means for renewing the managed service information based on the quality evaluated by said evaluation means.

2. (original): A service management apparatus according to claim 1, wherein said evaluation means evaluates the result of the trial use of the service executed by said test means by a predetermined evaluation function.

3. (original): A service management apparatus according to claim 2, wherein said renewal means deletes the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

4. (original): A service management apparatus according to claim 2, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

5. (original): A service management apparatus according to claim 2, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

6. (currently amended): A service management apparatus according to claim 1, wherein:

said test means executes an access process for writing data to a storage service and reading data from the storage service on a trial basis ~~for a storage service~~; and

said evaluation means evaluates the quality of the storage service based on the result of the access process performed by said test means.

7. (currently amended): A service management apparatus according to claim 1, wherein said evaluation means detects the number of colors or recording sheets

available in ~~the~~ an imaging service and evaluates the quality of the service based on the number of colors or recording sheets available in the service.

8. (currently amended): A service management apparatus according to claim 1, wherein the ~~plural~~ plurality of apparatuses includes a printer.

9. (currently amended): An apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said apparatus comprising:

test means for executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein, in said trial use, said test means sends data to the service;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

deletion means for instructing, in a case the quality evaluated by said evaluation means does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

10. (currently amended): An apparatus connected to a service management apparatus for managing service information of various services present on a network

system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said apparatus comprising:

test means for executing a process of the trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in said trial use, said test means sends data to the service;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

substitution means for instructing, in a case the quality evaluated by said evaluation means does not meet a predetermined reference, the service management apparatus to substitute the service provided by the another apparatus with a service provided by said apparatus.

11. (currently amended): A service management method for use in a network system capable of providing various services dispersed in ~~plural~~ a plurality of apparatuses, managing service information of the various services present on the network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said ~~the~~ service management method comprising:

a test step of executing a process of a trial use of one of the various services provided by said service management method, wherein in the trial use, data are sent to the service;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a renewal step of renewing the managed service information based on the quality evaluated in said evaluation step.

12. (original): A service management method according to claim 11, wherein said evaluation step includes evaluating the result of the trial use of the service executed in said test step by a predetermined evaluation function.

13. (original): A service management method according to claim 12, wherein said renewal step includes deleting the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

14. (original): A service management method according to claim 12, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

15. (original): A service management method according to claim 12, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

16. (currently amended): A service management method according to claim 11, wherein:

said test step includes executing an access process for writing data to a storage service and reading data from the storage service on a trial basis ~~for a storage service~~; and

said evaluation step includes evaluating the quality of the storage service based on the result of the access process performed in said test step.

17. (currently amended): A service management method according to claim 11, wherein said evaluation step includes detecting the number of colors or recording sheets available in ~~the~~ an imaging service and evaluates the quality of the imaging service based on the number of colors or recording sheets available in the imaging service.

18. (currently amended): A service management method according to claim 11, wherein the ~~plural~~ plurality of apparatuses includes a printer.

19. (currently amended): A method for use in an apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said method comprising:

a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in the trial use, data are sent to the service;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a deletion step of instructing, in a case the quality evaluated in said evaluation step does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

20. (currently amended): A method for use in an apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said method comprising:

a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in the trial use, data are sent to the service;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a substitution step of instructing, in a case the quality evaluated in said evaluation step does not meet a predetermined reference, the service management apparatus to substitute the service provided by the another apparatus with a service provided by said apparatus.

21. (currently amended): A computer readable storage medium storing a program for executing a service management method for use in a network system capable of providing various services dispersed in ~~plural~~ a plurality of apparatuses, managing service information of the various services present on the network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said program comprising:

code for a test step of executing a process of a trial use of one of the various services provided by said apparatus, wherein in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a renewal step of renewing the managed service information based on the quality evaluated by said code for an evaluation step.

22. (original): A computer readable storage medium according to claim 21, wherein said code for an evaluation step evaluates the result of the trial use of the service executed by said code for a test step by a predetermined evaluation function.

23. (original): A computer readable storage medium according to claim 22, wherein said code for a renewal step deletes the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

24. (original): A computer readable storage medium according to claim 22, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

25. (original): A computer readable storage medium according to claim 22, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

26. (currently amended): A computer readable storage medium according to claim 21, wherein:

said code for a test step executes an access process for writing data to a storage service and reading data from the storage service on a trial basis ~~for a storage service~~; and

said code for an evaluation step evaluates the quality of the storage service based on the result of the access process performed by said test means.

27. (currently amended): A computer readable storage medium according to claim 21, wherein said code for an evaluation step detects the number of colors or recording sheets available in the an imaging service and evaluates the quality of the imaging service based on the number of colors or recording sheets available in the imaging service.

28. (currently amended): A computer readable storage medium according to claim 21, wherein the ~~plural~~plurality of apparatuses includes a printer.

29. (currently amended): A computer readable storage medium storing a program executing a method for use in an apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said apparatus comprising:

code for a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a deletion step of instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

30. (currently amended): A computer readable storage medium storing a program executing a method for use in a[[n]] first apparatus connected to a service management apparatus for managing service information of various services present on a

network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said ~~apparatus~~ program comprising:

code for a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of ~~said~~ the first apparatus, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a substitution step of instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service management apparatus to substitute the service provided by the ~~[[an]]~~ other apparatus with a service provided by ~~said~~ the first apparatus.

31. (currently amended): A computer program executing a service management method for use in a network system capable of providing various services dispersed in ~~plural~~ a plurality of apparatuses, managing service information of various services present on the network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said program comprising:

code for a test step of executing a process of a trial use of one of the various services provided by the service management method, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a renewal step of renewing the managed service information based on the quality evaluated by said code for an evaluation step.

32. (original): A computer program according to claim 31, wherein said code for an evaluation step evaluates the result of the trial use of the service executed by said code for a test step by a predetermined evaluation function.

33. (original): A computer program according to claim 32, wherein said code for a renewal step deletes the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

34. (original): A computer program according to claim 32, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

35. (original): A computer program according to claim 32, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

36. (currently amended): A computer program according to claim 31,
wherein:

said code for a test step executes an access process for writing data to a storage service and reading data from the storage service on a trial basis ~~for a storage service~~; and

said code for an evaluation step evaluates the quality of the storage service based on the result of the access process performed by said code for a test step.

37. (currently amended): A computer program according to claim 31,
wherein said code for an evaluation step detects the number of colors or recording sheets available in ~~the~~ an imaging service and evaluates the quality of the imaging service based on the number of colors or recording sheets available in the imaging service.

38. (currently amended): A computer program according to claim 31,
wherein the ~~plural~~ plurality of apparatuses includes a printer.

39. (currently amended): A computer program executing a method for use in an apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said program comprising:

code for a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a deletion step for instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service management apparatus to delete the service information from the service management apparatus.

40. (currently amended): A computer program executing a method for use in a[[n]] first apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from ~~an~~ the external apparatus, said program comprising:

code for a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of ~~said~~ the first apparatus, wherein, in the trial use, data are sent to the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a substitution step of instructing, in a case the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service

management apparatus to substitute the service provided by the [[a]]nother apparatus with a service provided by ~~said~~ the first apparatus.

41. (new): A service management apparatus according to claim 1, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

42. (new): A service management apparatus according to claim 9, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

43. (new): A service management apparatus according to claim 10, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

44. (new): A service management method according to claim 11, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

45. (new): A service management method according to claim 19, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

46. (new): A service management method according to claim 20, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

47. (new): A computer readable storage medium according to claim 21, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

48. (new): A computer readable storage medium according to claim 29, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

49. (new): A computer readable storage medium according to claim 30, wherein said code for a test step includes, in the trial use, sending a service request to the

one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

50. (new): A computer program according to claim 31, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

51. (new): A computer program according to claim 39, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

52. (new): A computer program according to claim 40, wherein said code for a test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.